

THE FORMATION AND SOURCES OF EARLY BYZANTINE FLORAL SEMIS AND FLORAL DIAPER PATTERNS REEXAMINED

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Next to the vegetal scroll, probably the two most ubiquitous patterns of fifth-, sixth-, and seventh-century mosaic pavements are a floral semis organized on a geometric grid and a floral diaper with various fillers in its interstices.¹ The design of a floral semis usually consists of one or two types of floral or foliate motifs arranged in staggered rows. Where the white background was set as a scale imbrication, the floral buds were placed at the tip of the scales (Fig. 1).² The diagonal diaper pattern consists of a chain of florets or bands of schematized floral motifs forming a net-like cover over an entire, mostly white background, with various organic and inorganic elements as fillers of the interstices (Figs. 2 and 3).³

The subject of this paper was first sketched out in the conclusion of my doctoral dissertation, *The Role of Ornament in Late Antique Interiors with Special Reference to Intermedia Borrowing of Patterns*, which was written under the most kind and generous supervision of Prof. Ernst Kitzinger and Prof. Oleg Grabar and accepted by Harvard University in 1981.

¹The most extensive study of the floral semis and the diagonal diaper so far was done by D. Levi in *Antioch Mosaic Pavements*, I (Princeton, 1947), 436–53. See also C. R. Morey, *The Mosaics of Antioch* (New York, 1938), 42–45; J. Lassus, “La mosaïque du Phénix provenant des fouilles d’Antioche,” *MonPiot* 36 (1938), 96–99; and E. Kitzinger, “Stylistic Developments in Pavement Mosaics in the Greek East from the Age of Constantine to the Age of Justinian,” *Colloque Internationale sur “La mosaïque gréco-romaine,”* Paris, 1963 (Paris, 1965), 347–49 (rpr. in idem, *The Art of Byzantium and the Medieval West: Selected Studies*, ed. W. E. Kleinbauer [Bloomington, 1976], 70–72); idem, *Byzantine Art in the Making* (Cambridge, Mass., 1977), 89–90.

²E.g., on the Phoenix mosaic from Antioch, ca. A.D. 500 (Lassus, *Mosaïque*, 89–117; Levi, *Antioch*, 351–55, fig. 143, pls. 83a–b, 134; F. Baratte, *Catalogue des mosaïques romaines et paléochrétiennes du musée du Louvre* [Paris, 1978], no. 44, pp. 92–98, figs. 87–92), or in the triclinium mosaic from Apamea, now in Brussels, with an A.D. 539 date but possibly done earlier (J. Balty, *La grande mosaïque de chasse du triclinos, Fouilles d’Apamée de Syrie, Miscellanea* 2 [Brussels, 1969], 14, pls. 13 and 16).

³Two most familiar versions of the diagonal diaper pattern are illustrated by a floor from a late 6th-century synagogue in Jericho (M. Avi-Yonah, *Encyclopedia of Archaeological Excavations*

Both patterns are infinitely expandable. They most frequently decorated the main field of a given mosaic. Chronologically they came to be used profusely in the fifth century. They were far more common in the eastern than in the western part of the Mediterranean.⁴

As a fifth-century innovation in the ornamental repertory of pavement mosaics, both patterns have been seen either as the result of a gradual development or as a new creation under outside influences. D. Levi, for example, saw them as composed entirely of elements traditionally used in Greco-Roman wall painting and mosaics and “caused by an internal and quite spontaneous genesis from preceding motifs.”⁵ Of course, the simple geometric diagonal grid occurs already in opus signinum floors, as well as in other media; and simple diagonal diaper patterns with minimal floral elements in the interstices are known from Roman painting.⁶ Also, the basic elements of the structured semis, especially when used in conjunction with the scale imbrication pattern, can be seen as derived from the scales themselves, which are often

in the Holy Land, II [London, 1976], 571–73), and by the Striding Lion mosaic from Antioch, now in the Baltimore Museum of Art, and dated to the second half of the 5th century by Levi and to the late 5th or early 6th century by Kitzinger (Levi, *Antioch*, 321–23, fig. 135, pl. 74; and Kitzinger, “Stylistic Developments,” 348–49 and *Byzantine Art in the Making*, 89).

⁴Both patterns are not known to have been used within the Mediterranean area before the 5th century; see Levi, *Antioch*, 436–46. In Antioch, e.g., the fully developed diagonal diaper pattern appeared only around A.D. 400 on a floor from Dig D (Sector L 25; *ibid.*, 291, fig. 122, pl. 120d); other early examples are floors from Rooms 4 and 5 from the upper level of the House of the Buffet Supper (*ibid.*, 311–13, fig. 129, pls. 126a–b, d–e).

⁵*Ibid.*, 446.

⁶E.g., in the corridor of the Domus Aurea; N. Dacos, *La découverte de la Domus Aurea et la formation des grotesques à la Renaissance*, Studies of the Warburg Institute 31 (London, 1969), pls. 14–19, figs. 23–32.

outlined and contain an inserted motif, as J. Lassus pointed out in his discussion of the Phoenix floor from Antioch (Fig. 1).⁷

Employment of the vegetal elements in these patterns was, according to Levi, the result of "the tendency to replace the earlier geometric forms of floret with curvilinear and naturalistic forms."⁸ This position was also taken by Ernst Kitzinger, who saw them as an organic version of earlier geometric patterns and as ornamental counterparts to figure carpets with which they played an important role in the formation of the fifth-century surface-accepting ornament.⁹

On the other hand, textiles have been considered as a second, outside source for specific instances of both patterns, especially textiles imported from Sasanian Persia. This source was accepted by some scholars, for example, Lassus and C. R. Morey in connection with the Striding Lion mosaic and the Phoenix floor from Antioch,¹⁰ but strongly rejected by others, for example, Levi.¹¹ Since it is Professor Kitzinger's lifelong work and his support as an advisor that inspired me to undertake the study of late antique ornament, on this occasion I would like to reexamine the overall relationship between both patterns and textiles, and suggest that textiles—specifically, patterned silks—may be the source behind their formation and popularity. Such reexamination is necessary, for both patterns, already in the fifth century, figure prominently in the general repertoire of late antique ornament. Besides pavements, they were used in vault decoration, architectural sculpture, and in other media as well.

All-over designs with controlled structure and regular repetition of a selected number of decorative elements are commonly referred to as textile patterns (Fig. 4).¹² In textiles, the grid structure of the composition and the use of a limited number of ornamental motifs in regular repeats is dictated

to a great extent by the techniques of weaving. While repeat patterns of elementary geometric configurations could occur in any weaving technique, they are used exclusively in textiles in which patterning was done mechanically. Patterned silks were executed in mechanized techniques because the natural properties of the silk fiber were especially suitable for it.¹³ In the Roman and Early Byzantine context, whether the textiles were imported or domestically manufactured, all-over patterns are associated mainly with silks.¹⁴

The chronology and stylistic development of textile ornament is far from established.¹⁵ But with the help of archeologically recovered material, mainly from Egypt,¹⁶ and representations of cos-

¹³The exact evolution of mechanized patterning has not yet been reconstructed; for a review of the problem see A. Geijer, *A History of Textile Art* (Totowa, N.J., 1979), 96–106. It has been established that two separate weaving methods were developed, one in China and the other in the West, in the Roman or Sasanian Empire. In China the technique is directly related to the weaving of silk stuffs; in the West it was used first for woolen textiles and only later for silks. The most plausible theory for the development of the western method is that it started when pattern rods were introduced into a horizontal loom of a simple construction. This innovation has been credited to both Syrian and Sasanian weavers. Cf. O. von Falke, *Kunstgeschichte der Seidenweberei*, I (Berlin, 1913), 25–31; R. J. Forbes, *Studies in Ancient Technology*, IV, rev. ed. (Leiden, 1964), 211–21; Geijer, op. cit., 117–23.

¹⁴Although these patterns were first used for woolen fabrics where they are in general simple in construction and color scheme, e.g., in the so-called cushion covers that were found in a 3rd-century context in a grave from Antinoë. Because of their fine wool and texture these fabrics are often considered to be Sasanian imports; R. Pfister, "Le rôle de l'Iran dans les textiles d'Antinoë," *AI* 13–14 (1948), 46–74; Geijer, *Textile Art*, 100. Technically similar fabrics were found in a 5th-century context in Karanis; L. M. Wilson, *Ancient Textiles from Egypt in the University of Michigan Collection*, University of Michigan Studies, Humanities Series 31 (Ann Arbor, 1933), nos. 16–18, pp. 17–18, pl. 3.

¹⁵For silks, such an attempt was made by Falke (above, note 13), but by now many of his conclusions are obsolete. Constant discoveries of both textiles and comparative material, such as wall paintings in Central Asia and the Far East, are proving helpful in solving some problems of chronology, since the finds include imported artifacts from the West or objects with decoration that was inspired by such imports. For a review of archeologically dated textiles from China, see Hsio-Yen Shih, "Textile Finds in the People's Republic of China," *Studies in Textile History in Memory of Harold B. Burnham* (Toronto, 1977), 305–31. Concerning specifically the textile trade from the West, see A. A. Ierusalimskaja, "Zapadnye tkani na Dal'nem Vostoke (ellenizm i rannee srednevekov'e)," *Kul'tura i iskusstvo Indii i stran Dal'nego Vostoka*, Gosudarstvennyj Ordena Lenina, Ermitaż (Leningrad, 1975), 39–52. The important role of Central Asian wall paintings for the history of textiles and silks in particular is evaluated by A. A. Ierusalimskaja, "K složeniju školy khudožestvennogo šelkotkačestva v Sogde," *Srednjaja Azija i Iran*, ibid. (Leningrad, 1972), 33–41.

¹⁶Major archeological finds of patterned textiles, especially silks, were made in Egypt, in Panopolis (Akhmim), Antinoë (Sheikh Abade), Saqqara, and Karanis. Akhmim was excavated

⁷Lassus, *Mosaïque*, 97–99. One of the most popular fillers was peacock feathers, e.g., in the frigidarium of the Maison du Chef in Sousse; L. Foucher, *Inventaire des mosaïques, Sousse*, Fouille no. 57, *Atlas archéologique* (Tunis, 1960), no. 57. 275, p. 122, pl. 65a.

⁸Levi, *Antioch*, 446.

⁹Kitzinger, "Stylistic Developments," 346–48 and *Byzantine Art in the Making*, 88–89. Also see I. Lavin, "The Hunting Mosaics of Antioch and Their Sources," *DOP* 17 (1963), esp. 196–203.

¹⁰Morey, *Mosaics of Antioch*, 42–45; Lassus, *Mosaïque*, 97.

¹¹Levi, *Antioch*, 447–53.

¹²A silk fragment from Antinoë, formerly in the Schloss Museum, Berlin; O. von Falke, *Kunstgeschichte der Seidenweberei*, 2nd. ed. (Berlin, 1926), pl. 9.

tumes on monuments with historical figures, a relative chronology of patterned silks and the motifs used in their ornament can be assembled. By combining this evidence with written sources it is possible to ascertain that patterned silks became fashionable in the West in the fourth century.¹⁷ This period coincides with the acceptance of silk stuffs as the material of the imperial wardrobe. The delicate, all-over pattern of the *segmenta* of the tunic of Theodosius I and the *tablion* of his chlamys from the Madrid Missorium of 388 are among the earliest representations of what can be identified as a silk fabric (Fig. 5).¹⁸

The generic relationship between all-over floral designs and textiles was first pointed out by M. Rostovcev who also defined them as carpet patterns.¹⁹ Since then the association of repeat patterns with textiles has been so strong that any such pattern, the semis and diagonal diaper included, came to be referred to as a textile pattern, even without specific confirmation of its existence among the textiles themselves. But the semis and the floral diaper are not only visually and compositionally very similar to textile patterns, they are

also all-over structured designs. For example, the construction of the floral semis and the diaper patterns and the many patterned silks is the same. They all show an extensive area of background and the use of either staggered rows of ornamental motifs or the diagonal diaper of floral elements with various fillers in the intersections and within the interstices.

Many fragments of imported and domestic silks found in the late antique and Early Byzantine graves of Antinoë and other sites in Egypt are decorated with precisely the same sort of simple diagonal diaper pattern (Fig. 4) that occurs in mosaic floors from Antioch and elsewhere.²⁰ In some instances a more direct influence of patterned silks on floor mosaics cannot be altogether excluded. One such case is the "green carpet" floor from Antioch. Its design consists of a diagonal diaper of floral elements in several shades of rose placed on a green background.²¹ This unusual background color has already been commented on by Levi and Kitzinger, who compared it to a stylized flower meadow.²² But while the colored background is rare among fifth- and sixth-century pavements, it is characteristic of the contemporary patterned silks, which also offer parallels for the diagonal diaper design. The patterned silks most often have blue or red as the color of the main surface, while green was used less frequently.²³ The choice of the rarer green for the Antioch floor could have been dictated by such a practical consideration as the availability of suitable material for a mosaic pavement, in this case green limestone, while the choice of red or blue would have required the use of such fragile material as glass and the rarer jasper for red. But the majority of instances of floral diaper patterns on pavements cannot be so closely connected with any specific model. Patterned silks or other textiles would have served simply as sources of inspiration which would have been assimilated very quickly to the pavement mosaic idiom. This phase of the development of the patterns would be represented by the use of a more naturalistic floret and by the introduction of figural and other elements into the interstices in conformity with traditionally used filler motifs. It is this phase in the

by R. Forrer in the 1880s. It was the first site where ancient textiles were discovered. Akhmim silks are simpler in design than, for example, the Antinoë silks. They are dated to the 6th century and later and are considered to be of local origin; R. Forrer, *Römische und byzantinische Seiden-Textilien aus dem Gräberfelde von Achmim-Panopolis* (Strasbourg, 1891); Falke, *Kunstgeschichte*, 43–48, pls. 58–66. Antinoë was excavated by Gayet between 1897 and 1907. In thousands of hastily opened graves many textiles, including a large number of silks, were found. They are dated to the 4th century and later. The Antinoë silks are of extremely high quality. They are all done in the western technique of patterned weaving. Because of the high technical quality and exotic nature of many of their motifs, they are generally considered as Sasanian imports. This, however, cannot be proven for all patterns found in Antinoë; E. Guimet, *Les portraits d'Antinoë au Musée Guimet, Annales du Musée Guimet, Bibliothèque d'art* 5 (Paris, 1912); Falke, op. cit., 31–41, pls. 32–34, 37, 38, 40–46, 48–50; R. Pfister, "Les premières soies sassanides," *Etudes d'orientalisme* (Paris, 1932), 461–79; A. Geijer, "A Silk from Antinoë and the Sasanian Textile Art," *Orientalia suecana* 12 (1963), 3–36; idem, *Textile Art*, 99–100, 117–23. The Antinoë silks are extensively published in H. Peirce and R. Tyler, *L'art byzantin*, 2 vols. (Paris, 1932).

¹⁷ By the middle of the 4th century silk had become a quite common luxury in the empire, if we are to believe Ammianus Marcellinus, 23.6.67; trans. J. C. Rolfe, Loeb, rev. ed., 1971 and 1972. For a review of the written sources see Forbes, *Ancient Technology*, 50–58; and for a historical analysis cf. R. S. Lopez, "Silk Industry in the Byzantine Empire," *Speculum* 20 (1945), 1–42, and N. V. Pigulevskaja, *Byzanz auf den Wegen nach Indien* (Berlin, 1969), 80–87.

¹⁸ R. Delbrück, *Die Consulardiptychen und verwandte Denkmäler* (Berlin-Leipzig, 1926), no. 62, pp. 235–37.

¹⁹ M. Rostovcev, "Stekljannija raspisnyja vazy pozdneellnističeskogo vremeni i istorija dekorativnoj živopisi," *Izvestija Imperatorskoj Archeologičeskoi Kommissii* 54 (1914), 17–22.

²⁰ Above, notes 3 and 16.

²¹ Attributed to ca. A.D. 450, now in the Dumbarton Oaks Collection, Washington, D.C.; Levi, *Antioch*, 315–16, pls. 71a and 128b.

²² Ibid.; and Kitzinger, *Byzantine Art in the Making*, 89.

²³ The reds and blues are used commonly in textiles mainly because of the availability of stable dyes; see Forbes, *Ancient Technology*, 101–27.

formation of both patterns that was referred to by Levi and Kitzinger.²⁴

At the same time, the diagonal diaper, including its animate and inanimate fillers, became popular as decoration elsewhere. For example, it was used in a mosaic vault of the narthex of the Archbishop's Chapel in Ravenna,²⁵ where it produces the same surface-defining and surface-enclosing effect as the silk patterns of the Mausoleum of Galla Placidia and the south vault of the Church of St. George in Thessaloniki, which will be discussed below; in a painted version in an Umayyad bath at Qusayr Amrah in Jordan;²⁶ and in a carved form on a capital from Hebdomon.²⁷ A simple version of the diaper pattern also decorates consoles from the Church of St. Polyeuktos in Istanbul.²⁸ In this instance, it even seems that a silk or other textile model might have been copied directly.²⁹

Similar adoption and adaptation of silk-inspired patterns appeared in fifth-century wall mosaics, as can be seen in two versions of the semis patterns, one on the north and south vaults from the so-called Mausoleum of Galla Placidia in Ravenna of about 450 (Fig. 6),³⁰ the other on the south vault from St. George in Thessaloniki, most likely from the late fifth century (Fig. 7).³¹

The Ravenna mosaics have a deep blue background covered by an all-over semis consisting of three types of composite rosettes arranged in stag-

gered rows. The basic tonality of the vault is blue and gold, with touches of white, red, and green. Although the vaults often have been referred to as a star-studded sky, this impression is negated when they are compared to the mosaics of the dome where such a sky is certainly represented. Thus the comparison brings out the ornamental nature of these vaults. The design elements and their compositions make the decoration of the vault an ornamental, all-over pattern.

Although all-over floral patterns appeared sporadically in Roman wall and floor decoration from the second half of the first century A.D. onward, none of the known examples closely resembles the Galla Placidia vaults in its motifs and general visual effect.³² It is now recognized that textiles, specifically patterned silks, were the source of the Galla Placidia vaults.³³ Many of the Antinoë and other Egyptian silks, for example, share with the Ravenna vaults a composition of staggered rows of alternating motifs. Two examples, now in the Musée Historique des Tissus in Lyons, even use similar composite medallions and rosettes and the same number of design elements (Fig. 9).³⁴ The existence of patterns composed exclusively of rosettes among early silks has been indirectly confirmed by textiles discovered in China, and assigned to the seventh and eighth centuries.³⁵ The

²⁴ See above, also notes 8 and 9.

²⁵ Ca. A.D. 494–519. The narthex vault is covered with a floral diaper pattern, on a gold background, with a variety of birds filling the interstices. See: F. W. Deichmann, *Ravenna. Hauptstadt des spätantiken Abendlands*, I. *Geschichte und Monumente* (Wiesbaden, 1969), 201–6; II.1, *Kommentar* (Wiesbaden, 1974), 204; III, *Frühchristliche Bauten und Mosaiken von Ravenna*, 2nd. ed. (Wiesbaden, n.d.), pl. 218.

²⁶ Dated to the first half of the 8th century. M. Almagro et al., *Qusayr Amra, Residencia y baños omeyas en el desierto de Jordania* (Madrid, 1975), esp. pls. 39–42; see also O. Grabar, *The Formation of Islamic Art* (New Haven-London, 1973), 45–48.

²⁷ From the Church of St. John the Baptist, now in the Archaeological Museum in Istanbul, ca. A.D. 525. T. Mathews, *The Byzantine Churches of Istanbul: A Photographic Survey* (University Park, Pa., 1976), 140–142, no. 14.

²⁸ A.D. 524–527. C. Mango and I. Ševčenko, "Remains of the Church of St. Polyeuktos at Constantinople," *DOP* 15 (1961), 243–47; A. Gonosová, *The Role of Ornament in Late Antique Interiors with Special Reference to Intermedia Borrowing of Patterns*, Diss. (Harvard University, 1981), 305, fig. 234; C. Strube, *Polyeuktoskirche und Hagia Sophia*, AbhMünch, Phil.-hist.Kl., N.F., 92 (Munich, 1984), esp. 61–77, fig. 61.

²⁹ The design of the consoles is very close to the Antinoë silks of the Berlin fragment type (Fig. 4). Most recently, Strube (above, note 28) identified this design as an imitation of a Sasanian stucco pattern without, however, being able to provide a compelling parallel.

³⁰ See mainly Deichmann, *Ravenna*, I, 158–70; II.1, 88–90; III, pl. 1 and 3.

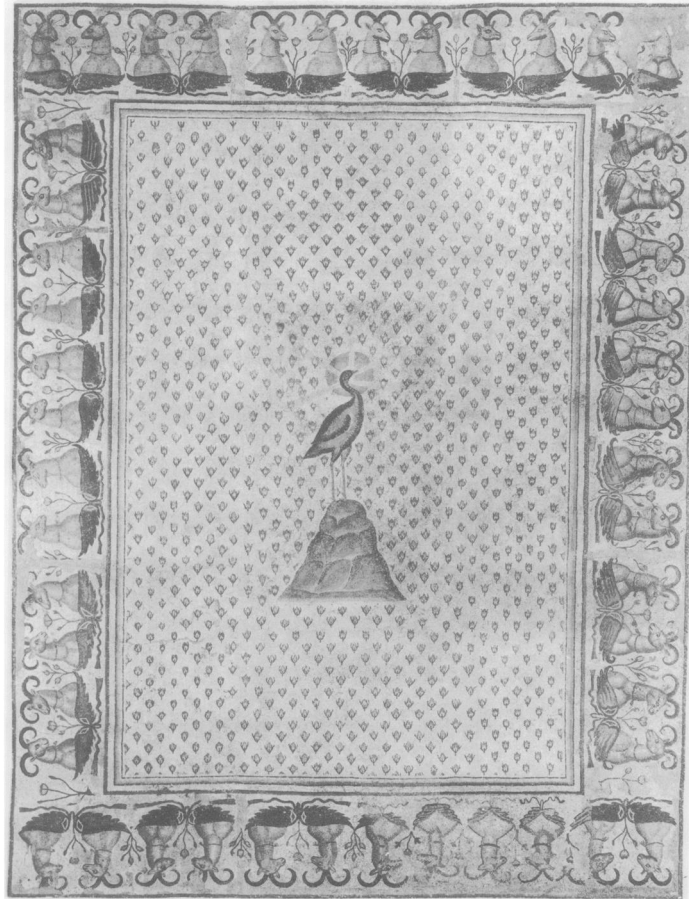
³¹ See below, note 36.

³² It seems that in the case of the Roman patterns the floral elements were used either as embellishments of a clearly drawn grid system, as in the corridor ceiling of the Domus Aurea (above, note 6), or were assembled in chains of distinct flower-with-stem units with a recognizable vertical emphasis, as on the mosaic columns from the House of the Mosaic Columns from Pompeii, assigned to the third quarter of the 1st century A.D.; F. Sear, *Roman Wall and Vault Mosaics*, RM, *Ergänzungsheft* 23 (Heidelberg, 1977), no. 49, p. 83, pls. 30.1 and 31.1.

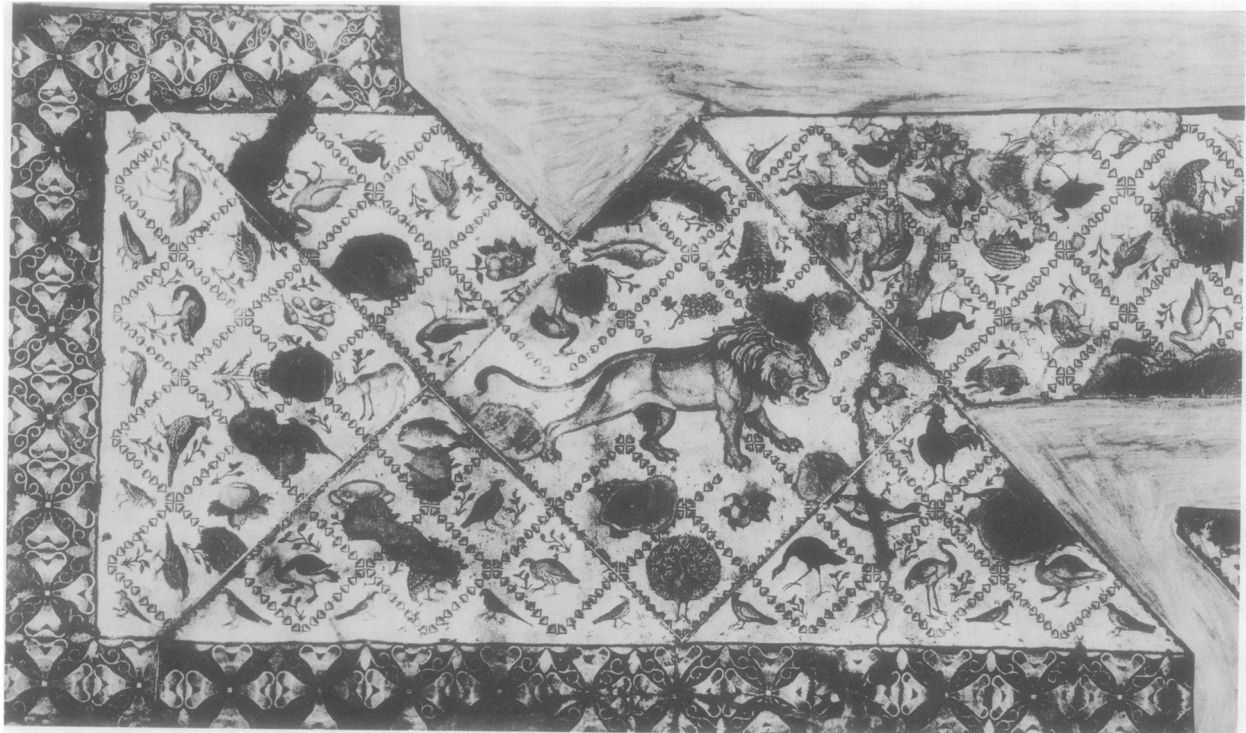
³³ Deichmann, *Ravenna*, II.1, 88; Kitzinger, *Byzantine Art in the Making*, 54. Galassi compared the design to a tapestry fragment from Egypt, formerly in the Kaiser Friedrich Museum, Berlin (G. Galassi, *Roma o Bisanzio I. I mosaici di Ravenna e le origini dell'arte italiana*, 2nd. ed. [Rome, 1953], 20–21, fig. 2; also O. Wulff and F. W. Volbach, *Spätantike und koptische Stoffe aus ägyptischen Grabfunden, in den Staatlichen Museen, Kaiser-Friedrich-Museum, Schliemann-Sammlung* [Berlin, 1926], no. 11456, pl. 32), most likely a local tapestry imitation of a patterned silk. The question of the imitation of imported silks in domestically produced tapestries has been addressed by E. Kitzinger, "The Horse and Lion Tapestry at Dumbarton Oaks: A Study in Coptic and Sassanian Textile Design," *DOP* 3 (1946), 1–72.

³⁴ Lyons, Musée Historique des Tissus, inv. no. 26 812/3, from Antinoë (Peirce and Tyler, *L'art byzantin*, II, pl. 53c; above, note 16), and inv. no. 22 705/B 79, from an unknown site in Egypt; ex-collection Bock.

³⁵ *Ssu-ch'ou chih-lu; Han T'ang chih-wu* (Silk Road: From Han to T'ang) (Peking, 1972), pl. 39; see also M. W. Meister, "The Pearl Roundel in Chinese Textile Design," *AO* 8 (1970), 260 and 265, figs. 40–41; Kitzinger, *Byzantine Art in the Making*, 54 note 24. The possibility cannot be excluded that this pattern is a Chinese interpretation of textiles manufactured somewhere west of China.



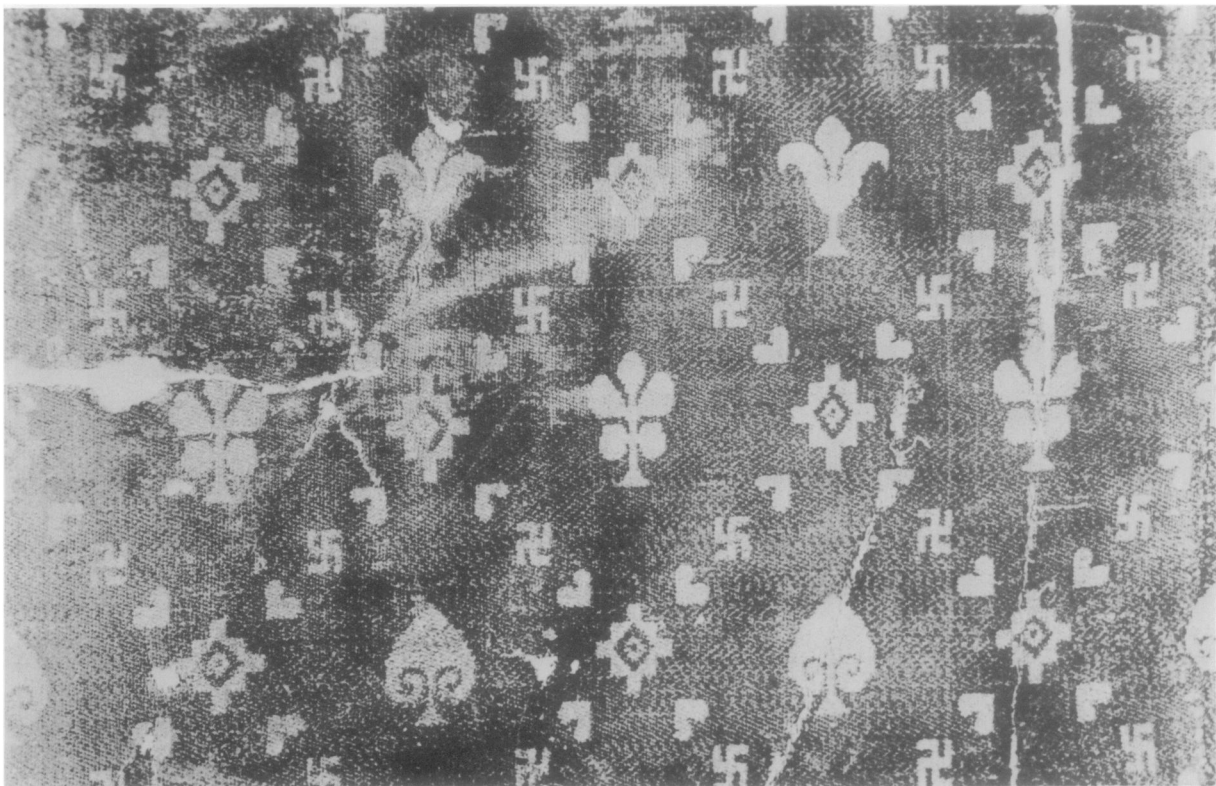
1. Antioch, Mosaic of the Phoenix. Paris, Louvre
(photo: Musées Nationaux)



2. Antioch, Mosaic of the Striding Lion. Baltimore, Baltimore Museum of Art
(photo: Art Museum, Princeton University)



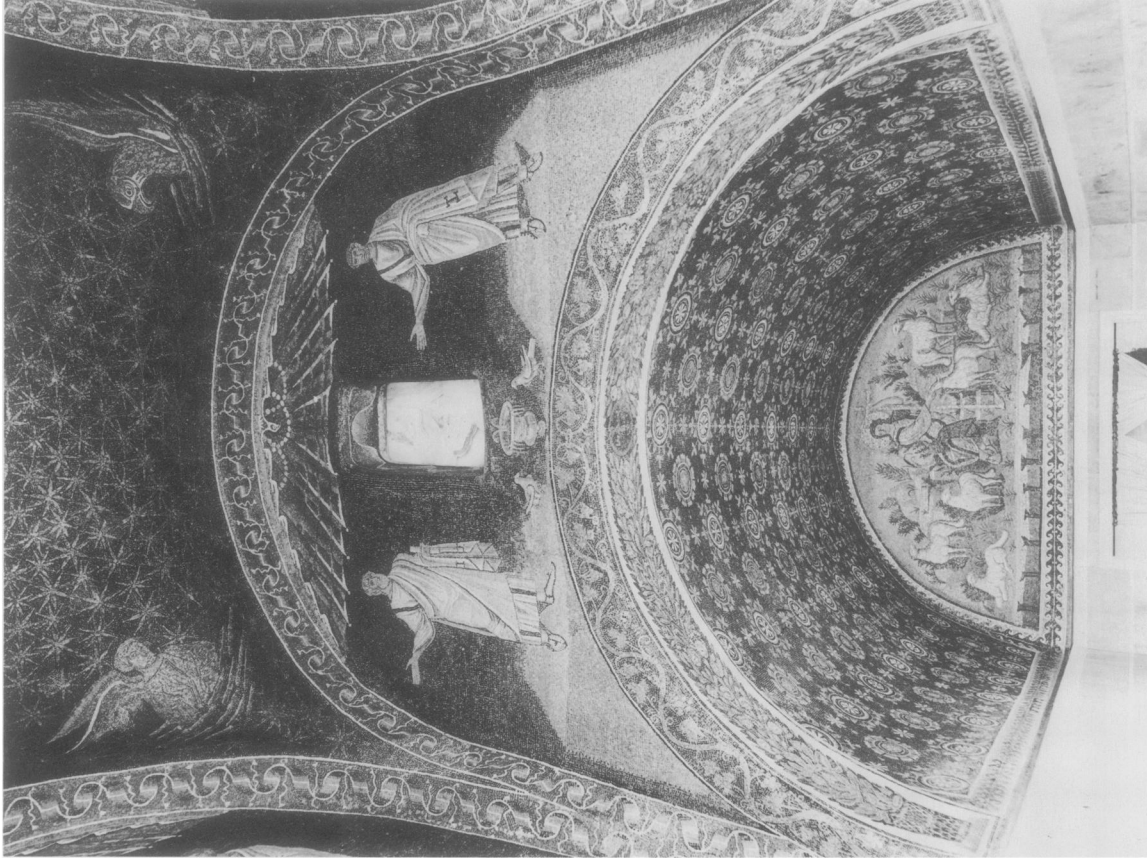
3. Jericho, synagogue floor



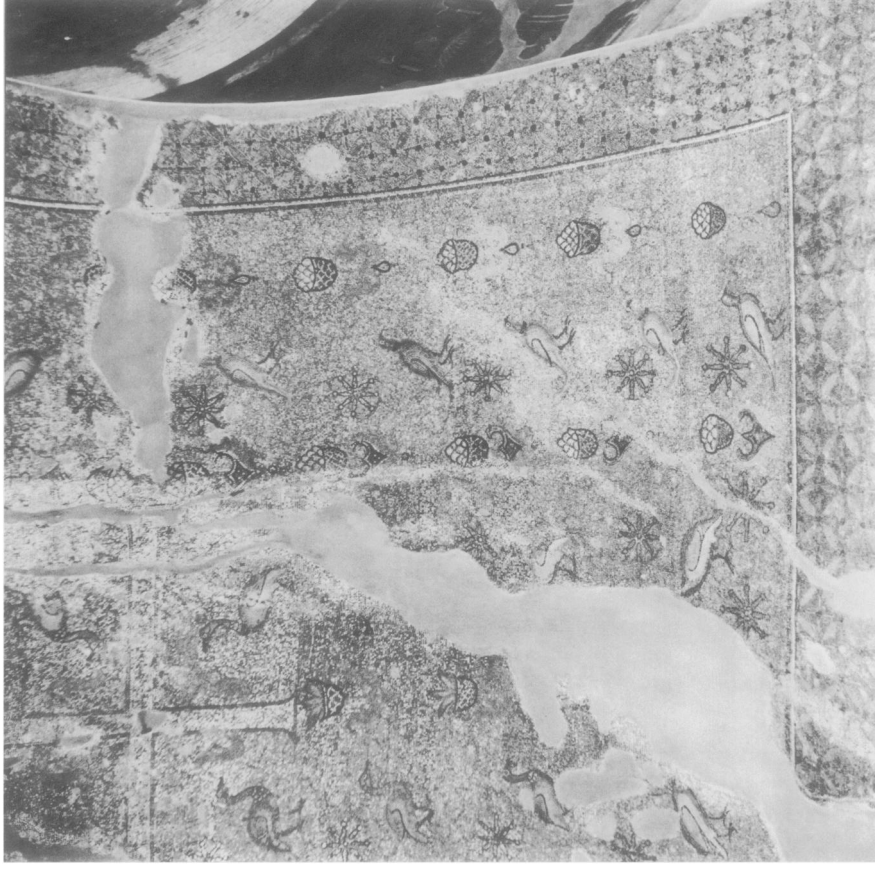
4. Silk fragment from Antinoë. Formerly Schloss Museum, Berlin
(after Falke, *Kunstgeschichte der Seidenweberei*)



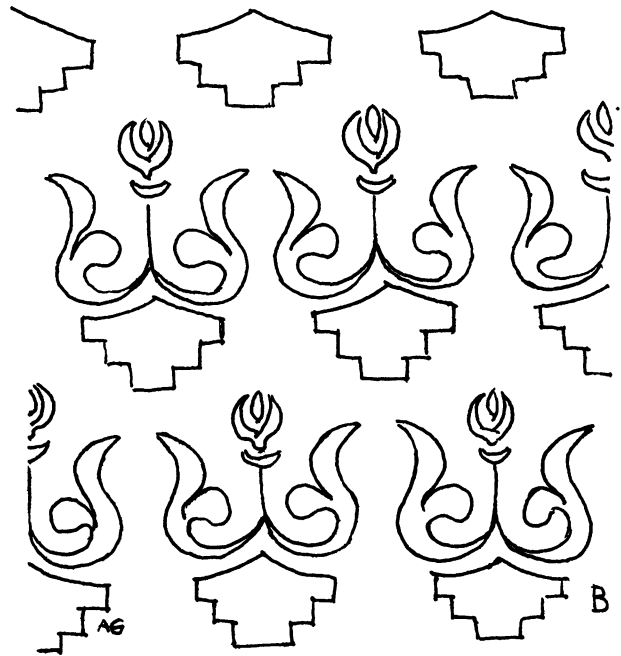
5. Theodosius I from the Madrid Missorium. Madrid, Academia de la Historia
(after Delbrück, *Die Consulardiptychen*)



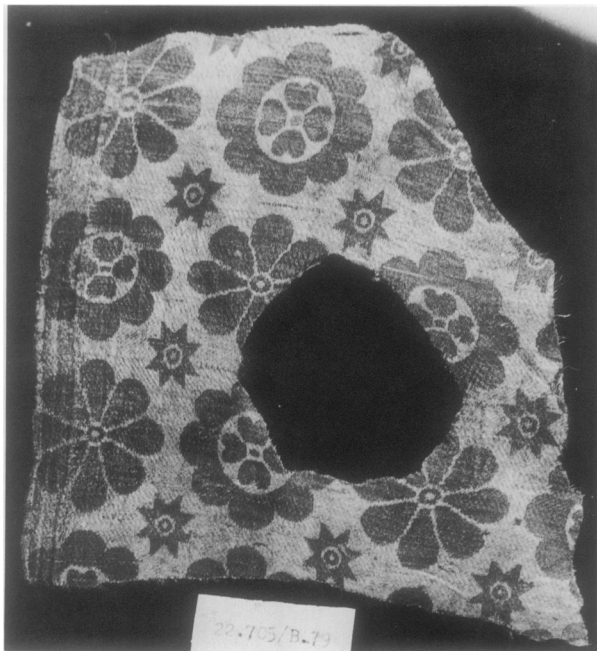
6. Ravenna, Mausoleum of Galla Placidia
(photo: German Archeological Institute, Rome)



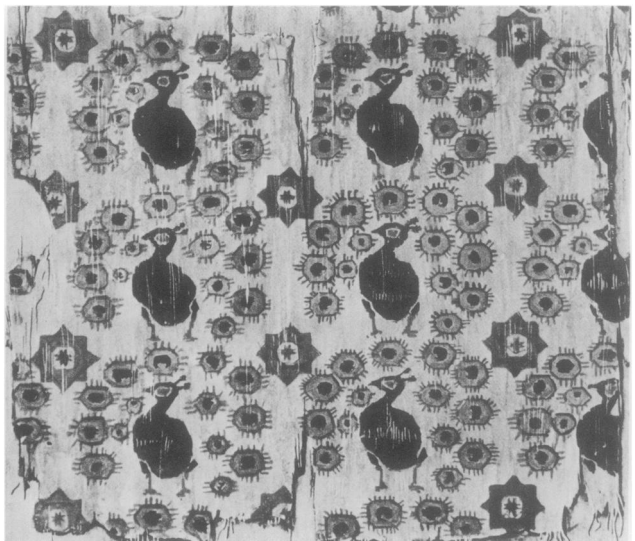
7. Thessaloniki, St. George, south vault (photo: D. Winfield)



8. Silk fragments from Antinoë: (a) Lyons, Musée Historique des Tissus; (b) Paris, Louvre



9. Silk fragment from Antinoë. Lyons, Musée Historique des Tissus (photo: Musée Historique des Tissus)



10. Peacock silk from Antinoë. Paris, Musée de Cluny (after Guimet, *Les portraits d'Antinoë*)

Galla Placidia mosaics also captured such peculiarities of patterned silks as the effect of complete unity of the surface, achieved by a special relationship between the background and the design elements. The early patterned silks were from the start conceived as one unified surface, for neither in designing nor in weaving was a differentiation made between the surface of the pattern and the surface of the color field around it (generally referred to as a background); rather, they are equivalent both visually and in the material substance of the fabric itself (Figs. 4, 8, 9, and 10). Like the patterned silks, the vault decoration should not be seen as consisting of two visually separate strata with the blue as the background and the rosettes as the design placed over it, or as star motifs floating in an abstract blue space. Rather, both components constitute the same surface—the rosettes simply replace the blue field. This particular aspect of patterned silks is even more explicitly present in the mosaics of the south vault in the Church of St. George in Thessaloniki.

Nevertheless, the Galla Placidia vaults are not a precise copy of their textile model, for the mosaicists incorporated more familiar ornamental elements into the design and brought about minor formal adjustments without, however, destroying the essential characteristics of the textile pattern. These adjustments were due to the persistence of a certain work routine. For example, the four-petal flower in the centers of the smaller rosettes is a well-known decorative motif in floor mosaics and elsewhere in Roman and Early Byzantine ornament, and the petal-like border is the same as the chain of leaves commonly used in late Antiquity as a part of the egg-and-leaf motif on walls, ceilings, and floors. The same applies to the three-lobed gold leaf projecting from the corona of the large rosettes and resembling in shape a late Roman and Early Byzantine type of a vine leaf. The substitution of a more common vine leaf for a more exotic floral motif is easy to understand. It could take place nearly automatically, since the classical vine scroll was used elsewhere in the mausoleum. The effect of mosaic technique and work routine is also evident in the color gradation of some of the leaf and floral motifs. But in spite of these stylistic adaptations, the textile character of the design is preserved.

The second, clearly silk-inspired semis design decorates the south vault of the Church of St. George in Thessaloniki (Fig. 7).³⁶ It consists of sev-

eral elements that cover the entire surface of the vault in a carefully composed but repetitious manner. First, there are fantastic arrangements with baskets supported on palmette-like stands in two variations, one with blue leaves and the other with green. The leaves of the latter are enriched with gold, which is also used on the baskets and on tear-shaped elements below the palmettes. Second, there are birds, again in blue and green, forming staggered rows between the palmette motifs. An array of eight-pointed stars in separate rows and the large Latin cross in the center of the vault, all in gold outlined in red, are not a part of the silk-inspired design but rather are clearly superimposed on it. This is apparent from the way in which the blue palmettes of the basket motif show on both sides of the cross.

The south vault has already been considered as inspired by late antique silks. H. Torp, for example, compared it to a kind of a baldachino that was placed over the entrance of the newly converted church.³⁷ But neither Torp nor other scholars were concerned with the formal peculiarities of the south vault itself. They did not go beyond pointing out a general model for the decoration, which was identified as a textile, most likely of Sasanian origin.³⁸ I believe that a textile, specifically a patterned silk, was imitated here mainly for its intrinsic formal and visual characteristics.

The unique character of the St. George vault does not exclude the possibility that its mosaicists directly copied a piece of silk. Certain elements of the design, for instance, the palmettes of the basket motif, are unusual in other media of the decorative arts but have parallels in several patterned silks and other textiles recovered from the Antinoë graves. Since these silks are analogous to the tex-

Christian phase of the Thessaloniki rotunda are the reign of Theodosius I (A.D. 379–395; see H. Torp, *Mosaikkene i St. Georg-Rotunden i Thessaloniki* [Oslo, 1963], with bibliography), and the middle through the third quarter of the 5th century (M. Vickers, "The Date of the Mosaics of the Rotunda at Thessaloniki," *PBSR* 38 [1970], 183–87; and E. W. Kleinbauer, "The Iconography and the Date of the Mosaics of the Rotunda of Hagios Georgios, Thessaloniki," *Viator* 3 [1972], 27–107, with bibliography). A 6th-century date is favored by B. Brenk (*Spätantike und frühes Christentum* [Frankfurt am Main, 1977], 185–86, pls. 154, 155, 158) and most recently by J. M. Spieser (*Thessalonique et ses monuments du IV^e au VI^e siècle*, BEFAR 254 [Athens, 1984], 125–64).

³⁷ Torp, *Mosaikkene*, 17 and 21 (illus.).

³⁸ E.g., Torp, op. cit., 16–17; and A. Grabar, but referring to the west vault of the rotunda: "Le rayonnement de l'art sassanide dans le monde chrétien," *La Persia nel medioevo, Atti del Convegno Internazionale, Roma, 1970, Problemi attuali di scienza e di cultura*, Quaderno 160, Accademia Nazionale dei Lincei (Rome, 1971), 682–89, pl. VII.2; and, in the context of the 6th-century orientalizing style, also Spieser, *Thessalonique*, 135–41).

³⁶ The most frequently accepted alternatives for the first

tiles represented in costumes on monuments dating from the fourth through the sixth century, they confirm the affinity of the St. George vault with what might be contemporary textiles. Two silk fragments, one at the Louvre and the other in the Musée Historique des Tissus in Lyons, are decorated with an element very similar to the basket motif of the St. George mosaic. The Paris fragment (Fig. 8B) provides parallels for the composition, the basket element, and the overall effect.³⁹ The Lyons silk (Fig. 8A) is more complex in its design: two sets of navy blue roundels are arranged in staggered rows; one set of the roundels contains a pair of wings with panther-protome, the other set a split palmette with leaves curved upward toward a floral chalice or seedpod.⁴⁰ The latter is almost identical with the St. George basket motif. Moreover, another Antinoë silk, decorated with rows of peacocks, provides an analogy for the birds (Fig. 10).⁴¹ Similarly, the dresses of the ladies-in-waiting of Empress Theodora's entourage in the mosaic panel in S. Vitale in Ravenna repeat both motifs and colors known from archeologically recovered silks.

As in the Ravenna vaults, there are obvious differences between the rendering of the pattern elements in the St. George mosaic and in the patterned silks. The reasons for this transformation in the character of the elements are the same as those that I pointed out in connection with pavement mosaics and the vaults of the Mausoleum of Galla Placidia. Quite simply, for those exotic motifs

that resembled standard decorative elements, familiar forms were substituted. Thus all the birds in the pattern were made similar to those used elsewhere in the church and the seedpods of the Lyons silk became a dish filled with fruit. Only the more unusual forms, such as the split palmettes and the overall distribution of motifs, were conscientiously copied, and this preserved their dependence on the original model. But here too the essential visual aspect of a patterned silk was maintained. In general, closer adherence to the appearance of the patterned silks seen in the three vault mosaics than that seen in most of their pavement counterparts is undoubtedly due to the actual material used, which is primarily glass, silver, and gold tesserae.

In conclusion, the appearance in the Mediterranean area of the structured floral semis and the diagonal diaper in mosaics and other media during the fifth century coincided with a more frequent use of the patterned silks themselves. Clearly, then, the influence of the textiles went beyond individual imitations and may have directly influenced the very formation of these patterns. The Early Byzantine floral diaper pattern and the structured floral semis can be considered, therefore, if not always direct imitations of textiles and silks in particular, certainly as a timely attempt in the area of ornament to achieve a similar effect: the effect of an all-over surface definition. Extant Early Byzantine monuments suggest that the visual appeal of all-over, surface-defining patterns was a more general one, and that the ornamental effect produced by patterns such as the two discussed here can be considered a characteristic mode of the period.

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³⁹From Antinoë, formerly in the Musée Guimet Collection, Paris (no. 1164), now at the Louvre (Fig. 8B).

⁴⁰Lyons, Musée Historique des Tissus, inv. no. 26.812/124 (Fig. 8A).

⁴¹Paris, Musée de Cluny, inv. 21.839; in Guimet, *Les portraits d'Antinoë*, pl. 7 (above, note 16).